

Hisense[®]

LCD COLOR TV

USER MANUAL

TL 2020

Part No. IES050121

English



Please read all the safety and operating instructions carefully before you begin.

SAFETY CLASS

This is an IEC safety class product and must be grounded for safety.

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	<p>CAUTION</p> <p>RISK OF ELECTRIC SHOCK</p> <p>DO NOT OPEN</p>	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) .NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the set.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE WITH THE FCC RULES COULD VOID THE USER'S AUTHORITY TO OPERATE THIS EQUIPMENT.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Important safety instructions

1. READ THESE INSTRUCTIONS

All the safety and operating instructions should be read before the product is operated.

2. KEEP THESE INSTRUCTIONS

Retain safety and operating instructions for future reference.

3. HEED ALL WARNINGS

Adhere to all warnings on the product and in the operating instructions.

4. FOLLOW ALL INSTRUCTIONS

Follow all operating and use instructions.

5. DO NOT USE THIS APPARATUS NEAR WATER

Do not use the product near water. For example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

6. CLEAN ONLY WITH DRY CLOTH

Unplug the TV from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with a dry cloth.

7. DO NOT BLOCK ANY VENTILATION OPENINGS

Slots and openings in the cabinet back or bottom are provided for ventilation, to ensure reliable operation of the TV and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat resource. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

8. DO NOT INSTALL NEAR ANY HEAT SOURCES

This product should be situated away from heat sources such as radiators, stoves, or other products (including amplifiers) that produce heat.

9. DO NOT DEFEAT THE SAFETY PURPOSE OF THE POLARIZED OR GROUNDING-TYPE PLUG

A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS, CONVENIENCE RECEPTACLES, AND THE POINT WHERE THEY EXIT FROM THE APPARATUS.

11. ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

Important safety instructions

- 12. USE ONLY WITH CART, STAND, TRIPOD, BRACKET OR TABLE SPECIFIED BY THE MANUFACTURER, OR SOLD WITH THE APPARATUS. WHEN A CART IS USED, USE CAUTION WHEN MOVING THE CART/APPARATUS COMBINATION TO AVOID INJURY FROM TIP-OVER.**

Do not place this TV on an unstable cart, stand, tripod, bracket, or table. The TV may fall, causing serious injury to someone, and serious damage to the appliance. An TV and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

- 13. UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.**

For added protection for this TV receiver during a lightning storm, or when it is left unattended and unused for long period of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV due to lightning and power line surges.

- 14. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL. SERVICING IS REQUIRED WHEN THE APPARATUS HAS BEEN DAMAGED IN ANY WAY, SUCH AS POWER-SUPPLY CORD OR PLUG IS DAMAGED, LIQUID HAS BEEN SPILLED OR OBJECTS HAVE FALLEN INTO THE APPARATUS, THE APPARATUS HAS BEEN EXPOSED TO RAIN OR MOISTURE, DOES NOT OPERATE NORMALLY, OR HAS BEEN DROPPED.**

- 15. POWER SOURCE**

This TV should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For TVs intended to operate from battery power, or other sources, refer to the operating instructions.

- 16. POWER CORD PROTECTION**

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

- 17. OUTDOOR ANTENNA GROUNDING**

If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode (Fig.A).

- 18. LIGHTNING**

For added protection for this TV receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV due to lightning and power line surges.

- 19. POWER LINES**

An outside antenna system should not be located in the vicinity of overhead power lines, or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

- 20. OVERLOADING**

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

- 21. OBJECT AND LIQUID ENTRY**

Never push objects of any kind into this TV through openings as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill liquid of any kind into the TV.

- 22. SERVICING**

Do not attempt to service this TV yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

- 23. REPLACEMENT PARTS**

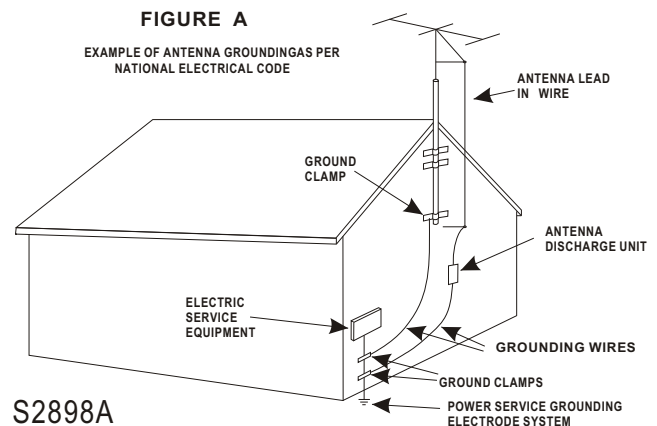
When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, injury to persons or other hazards.

- 24. SAFETY CHECK**

Upon completion of any service or repairs to this TV, ask the service technician to perform routine safety checks to determine that the TV is in proper operating condition.



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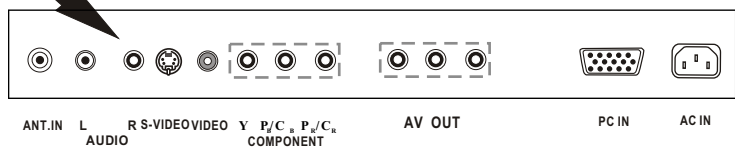
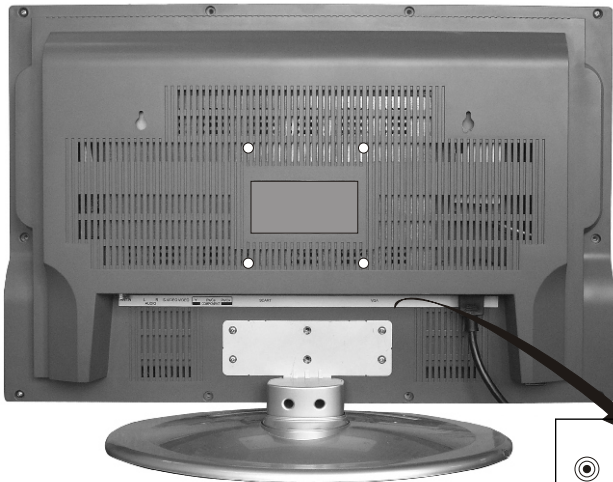


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Brief product overview

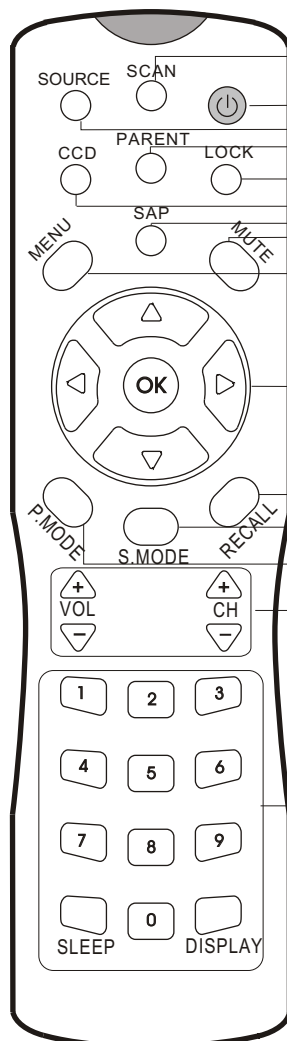
1.Connection

Connect the antenna lead or CATV cable or external equipment (such as Antenna, Cable TV, VCD, DVD, VCR, Set top box, etc.) to the corresponding terminals or interface on the TV rear (please refer to the owner's manual of the equipment to be connected as well) and confirm that the signal source is available and works.



2.The remote control

Open the back battery cover on the remote control and insert 2 x 'AAA' size batteries, noting the correct polarities marked inside the battery compartment. Next close the battery cover.



- SCAN:** Scan available channels
- POWER:** Power on/off
- SOURCE:** Select one of five input signal sources
- PARENT:** Parental control function
- LOCK:** Set child lock
- CCD:** Closed caption function
- SAP:** SAP/stereo/mono audio setting selection
- MUTE:** Mute the sound
- MENU:** Call up the main menu
- ▲/▼:** Cursor up/down
- ◀/▶:** Select or adjust from a particular menu
- OK:** Confirm selected function or return to the previous menu
- RECALL:** Return to previous channel
- S.MODE:** Select the sound mode
- P.MODE:** Select the picture mode
- VOL+/-:** Volume up/down
- CH+/-:** Channel up/down
- CHANNEL NUMBER:** Direct Channel selection
- SLEEP:** Set the sleep timer
- DISPLAY:** Display current status information

3.Switching on/off

- 1) Connect the TV to power outlet. Switch on the power switch located on the back of the TV (See page 6, item 21 for location), if the power indicator is red, it means the TV is off now. You need to press the **POWER** switch on the TV or the **POWER** button on the remote control to turn on the TV, and the power indicator will light up in blue.
- 2) Press the power switch or the **POWER** button on the remote control again to turn off the TV.

4.Signal source selection

Press the number [1-9] button or **CH+** or **CH-** button to select TV input; press the **SOURCE** button to select TV, Video, S-Video, VGA, Component.

5.Air/Cable selection

In order to access this setting, you need to be in the Antenna (TV) source mode (press **SOURCE** button repeatedly). You can select the signal receiving method according to the following steps:

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Search** and press the [▼] button to enter **Search** menu.
- 3) Press the [▲ or ▼] button to select the item **Tuning Mode**.
- 4) Press the [▶] button to change the item among **Air, Cable**.
- 5) Press **OK** button to confirm your selection. Press **OK** again to exit from the menu.

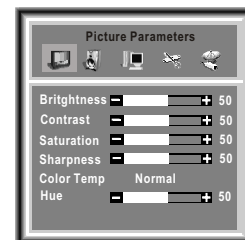
6.Channel search

In order to access this setting, you need to be in the Antenna (TV) source mode (press **SOURCE** button repeatedly).

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Search**, and press the [▼] button to enter **Search** menu.
- 3) Press the [▲ or ▼] button to select the item **Auto Search**.
- 4) Press the [▶] button to start auto searching for all available channels.
- 5) Once all the available channels have been memorized, you are now able to use the numerical buttons or channel + / - buttons to watch the channel number you desire.

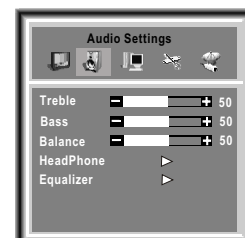
7.Picture adjustment

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Picture Parameters**, and press the [▼] button to enter **Picture Parameters** menu.
- 3) Press the [▲ or ▼] button to select the item you want to adjust.
- 4) Press the [◀ or ▶] button to adjust the level.
- 5) Press **OK** button to confirm your selection. Press **OK** again to exit from the menu.



8.Audio adjustment

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Audio Settings**, and press the [▼] button to enter **Audio Settings** menu.
- 3) Press the [▲ or ▼] button to select the item you want to adjust.
- 4) Press the [◀ or ▶] button to adjust the level.
- 5) Press **OK** button to confirm your selection. Press **OK** again to exit from the menu.

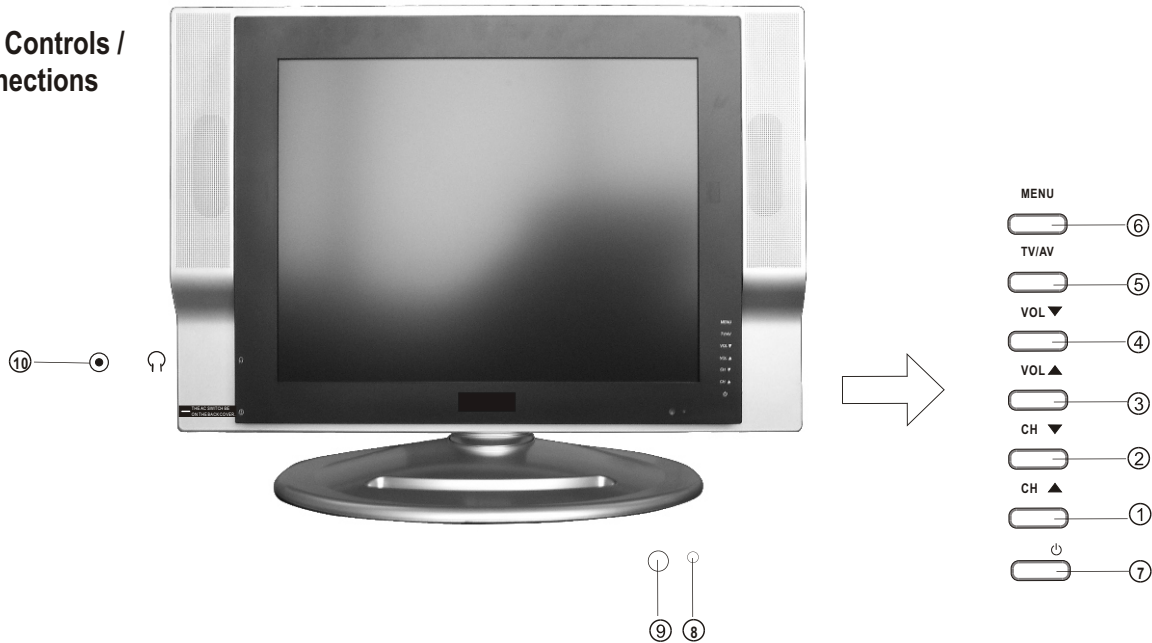


Note 1: All buttons mentioned above are on the remote control unless indicated otherwise.
Note 2: For more detailed information, please refer to the pages that follow.

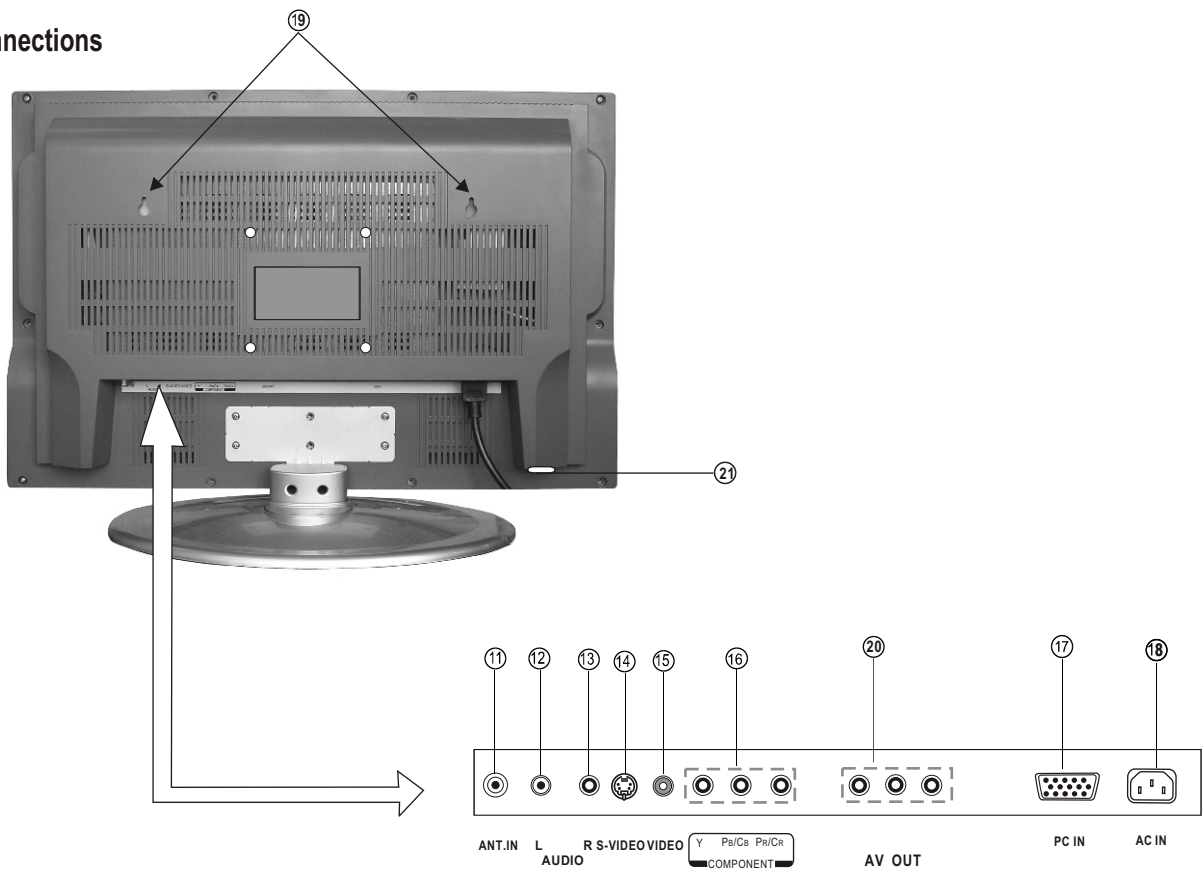
Learning about your new TV

You can operate your TV by using the buttons on the front panel or the remote control. The terminals on the side and the rear panel provide all the connections you will need to connect other equipment to your TV.

Side Controls / Connections



Rear Connections



Note: The above figures are for reference only. Please refer to the actual connection jacks to determine their appearance.

Learning about your new TV

- | | | |
|------------------------------|-----------------------------------|-------------------------------|
| ① Channel up / cursor up | ⑨ Remote control sensor | ⑰ PC VGA input |
| ② Channel down / cursor down | ⑩ Headphone jack | ⑱ POWER Plug |
| ③ Volume up / cursor right | ⑪ CATV antenna input | ⑲ Wall mounting locating hole |
| ④ Volume down / cursor left | ⑫ AV audio input L | ⑳ AV outputs |
| ⑤ TV / AV / PC input select | ⑬ AV audio input R | ㉑ Power switch |
| ⑥ MENU button | ⑭ S-Video input | |
| ⑦ POWER button (standby) | ⑮ AV Video input | |
| ⑧ POWER indicator | ⑯ Y PB/CB PR/CR input (Component) | |

Selecting a location for the TV

- 1) Place the TV on the floor or on a sturdy platform in a location where light does not directly hit the screen.
- 2) Place the TV far enough from the walls to allow proper ventilation. Inadequate ventilation may cause overheating, which may damage the TV.

Wall Mounting your TV

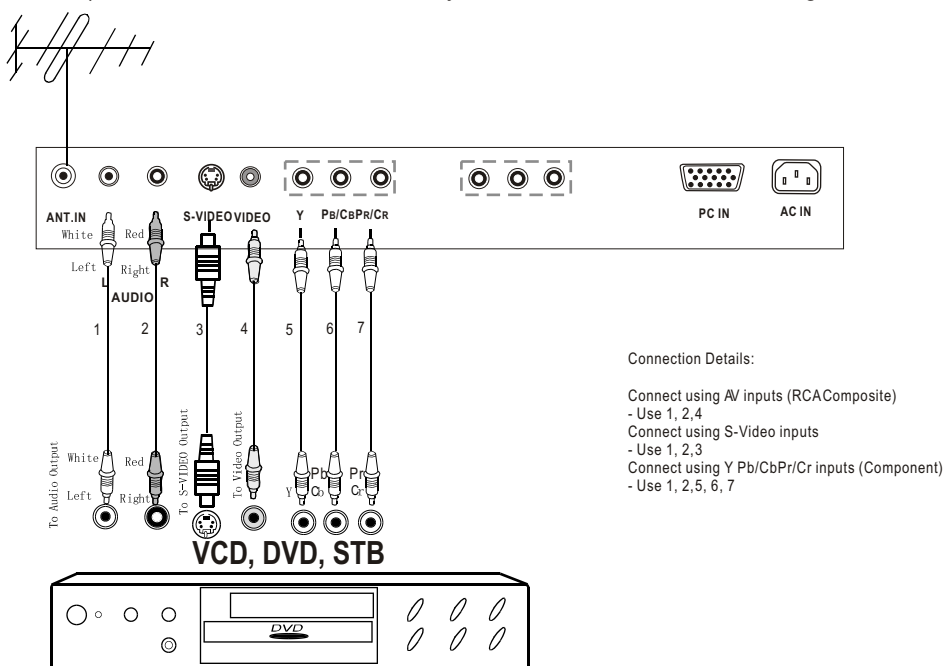
The TL2020 is a VESA compliant LCD TV which means that it can be wall mounted using a standard VESA compliant mounting bracket. VESA compliant mounting brackets are available at your local electronics store. The sizing of the bracket should be 100mm x 100mm. Please consult the store you are purchasing the bracket from for details. Note that the base of the TV needs to be removed before attaching the wall mounting bracket. Simply place the LCD screen, face down, on a soft, cushioned, non slip, non abrasive surface, making sure that it cannot slip or slide. Now remove the screws that are holding the base in place.

Connecting your TV

Caution: Do not plug the TV in until you have finished connecting all of your equipment.

Connecting audio/visual equipment

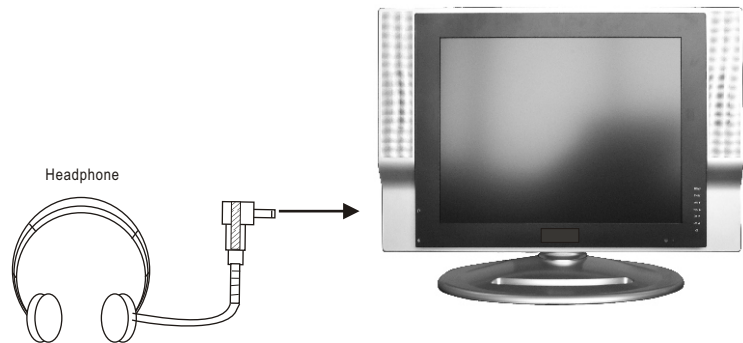
Follow the instructions below to hookup a VCR, DVD, satellite receiver, camcorder, audio amplifier, etc. (Cables not included). Use the SOURCE button on your remote control to select signal sources.



Connecting your TV

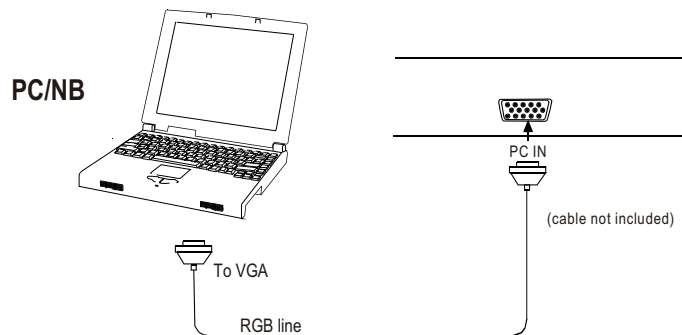
NOTE: 1) Headphones are not included.

2) No sound will be heard from the main unit speakers when a headphone mini-plug is connected into the headphone jack.



Connecting to a Personal Computer or Notebook

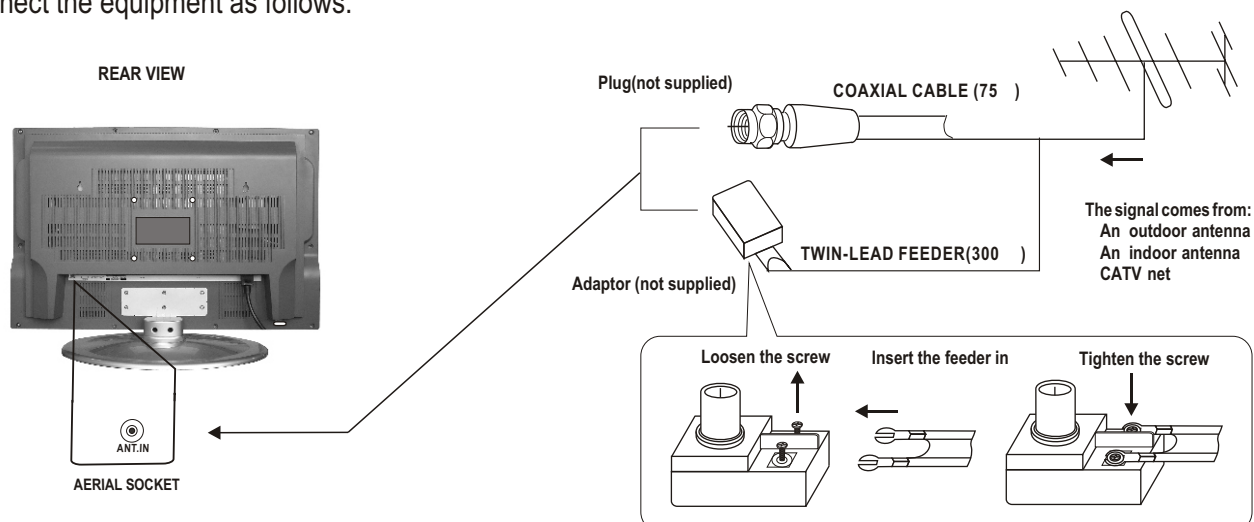
You can use your TV as a monitor for your PC or Notebook by connecting through the PC IN (VGA) connection jack. Connect the devices as shown below.



NOTE: The refresh rate of your PC & Notebook must be adjusted to 60Hz or below.

Connecting to an Aerial / Cable antenna

To enjoy the terrestrial signal transmitted by your local TV station, you need an indoor or outdoor aerial (not supplied). Perfect picture quality requires a good signal and generally means that an outdoor aerial must be implemented. The exact type and location of the aerial will depend on your particular area. Consult your local dealer or service personnel for best advice. If you are a subscriber of your local CATV provider, the outdoor or indoor aerial is not needed. Connect the equipment as follows:



Preparation for using your new TV

Connecting to a cable converter box

This television has an extended tuning range and can tune into most cable channels without using a cable company supplied converter box. Some cable companies offer premium pay channels in which the signal is scrambled. Descrambling these signals for normal viewing requires the use of a descrambler device which is generally provided by the cable company.

For subscribers to Basic Cable TV Service

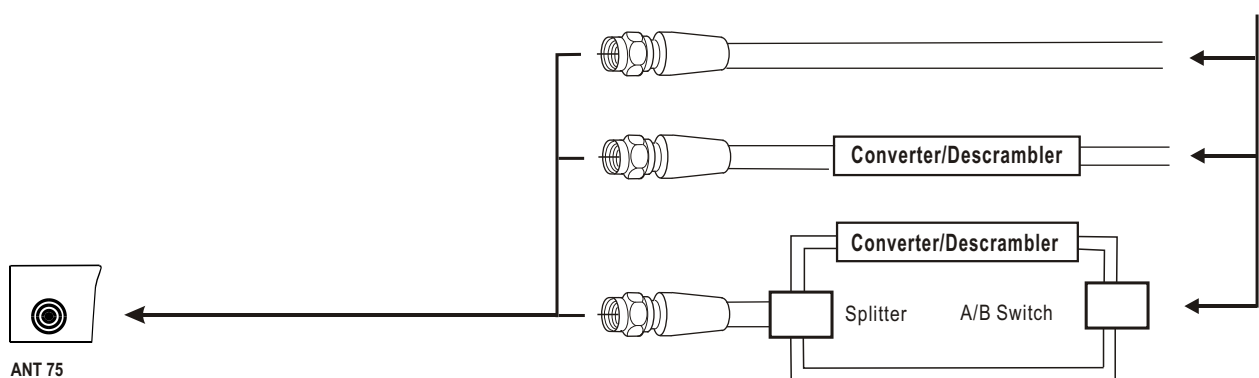
For basic cable service, you do not require a Converter/Descrambler box. Connect the CATV 75 ohm Coaxial Cable directly to the Antenna Jack on the back of the television.

For subscribers to Scrambled Cable TV Service

If you subscribe to a cable service which requires the use of a Converter/Descrambler box, connect the incoming cable to the Converter/Descrambler box and connect the output of the box to the Antenna Jack on the back of the television. Follow the connections shown below. Set the television to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box remote control to select channels.

For Subscribers to Unscrambled Basic Cable with Scrambled Premium Channels

If you subscribe to a cable service in which basic cable channels are unscrambled and premium channels require the use of a Converter/Descrambled box, you may wish to use a two-set signal splitter (sometimes Called two set coupler) and an A/B Switch box from the cable installer or an electronics supply store. Follow the connections shown below. With the switch in the **B** position, you can directly tune into any unscrambled channels on your TV. With the switch in the **A** position, tune your TV to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the box to tune into scrambled channels.



Note:

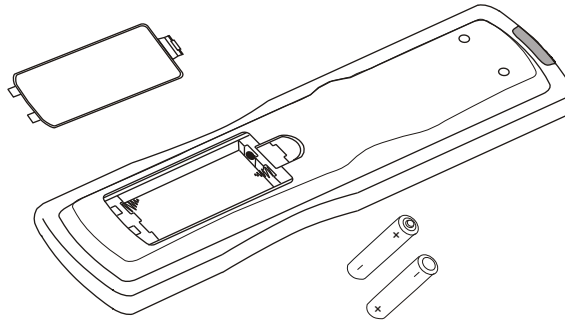
When you use a converter box with your TV, there may be TV features that you cannot access using the remote control that's provided with the converter box. Therefore keep the TV remote handy.

Using the remote control

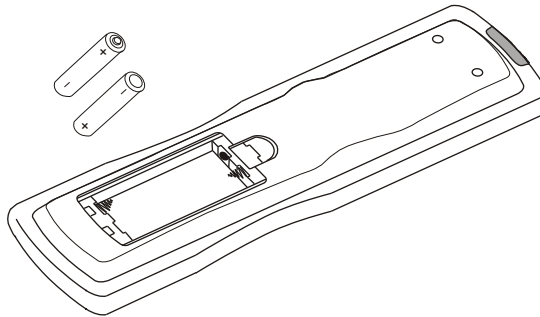
Preparing the remote control for use

Installing the remote control batteries

1. Open the battery cover on the back of the remote control.



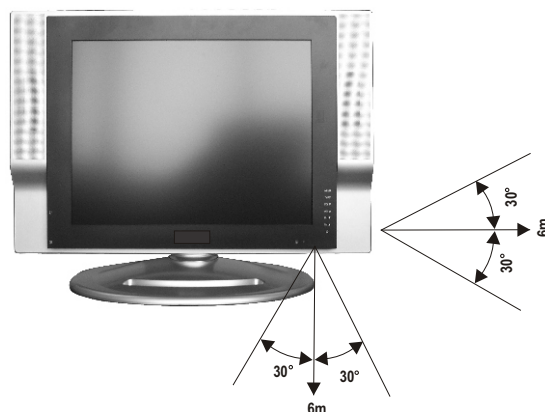
2. Insert two AAA size(1.5V) batteries (included). Match the + and - signs inside the batteries to the signs on the battery compartment.



3. Close the battery cover.

Note:

1. Dispose of your batteries in a designated disposal area. Do not throw your batteries into fire.
2. Do not mix battery types or combine used batteries with new ones.
3. Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.
4. If you do not intend to use the remote control for a long time, remove the batteries.
5. The effective range of remote control is suggested in the figure below.



Shortcut keys operation

Connecting POWER



Note:

Please pay attention to the power switch when you use our TV product firstly. According to the instruction of sticker label on the left speaker you will find it and switch TV on easily.

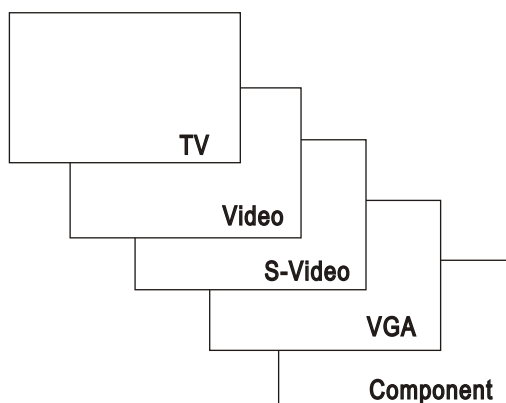
ON/OFF Standby

Press **POWER** on the remote control to turn off the LCD TV. The POWER indicator will turn red.

Press **POWER** again to turn the LCD TV back on. The POWER indicator will turn blue.

Selecting the signal source

1. Turn on the power of the connected video equipment.
- 2 Press the **SOURCE** button to toggle between the source inputs. Select among TV, Video, S-Video, VGA or Component.
3. The sound signal of all input signals except TV is inputted through the same AUDIO INPUT terminals.



DISPLAY	INPUT TERMINAL
TV	Antenna
Video	Video
S-Video	S-Video
VGA	PC IN(D-Sub15)
Component	Y P _B /C _B P _R /C _R

NOTE: The explanation about **Video**, and **S-Video** signals.

1. In signal input, the **Video** and **S-Video** signals use the same channel.
2. Only one of these two signals can be input and received at one time. Therefore one of the inputs must always be free. Otherwise the RCA Video and S-Video signals will affect each other.

Shortcut keys operation

Adjusting volume

Press **VOL-** or **VOL+** on the remote control or **▼ VOL ▲** on the TV to decrease or increase the volume.

Muting the sound

Press the **MUTE** on the remote control to temporarily turn off the sound. To restore the sound, press **MUTE** again. The mute function is automatically turned off when any of the following buttons are pressed: **POWER**, **VOL+**.

Changing channels

To change the channel, you can

1. Press **CH -** or **CH+** on the remote control or **▼ CH ▲** on the TV.
2. Press the channel number buttons (0-9).
 - 1) To select a one-digit channel : Press the 1-9 button to select channel directly.
 - 2) To select a two-digit channel : Press a button from 1-9 to select the first number, then press a button from 0-9 again to select the second number. For example, to select channel 28, press the 2 button first, 2-- will appear on the screen, and then press the 8 button; 28 will appear on the screen for one second.
 - 3) To select a three-digit channel: Press the 1 button to select the first number, then press buttons from 0-9 successively to select the other two numbers. For example, to select channel 120, press the button 1, 1---- will appear on the screen, then press the button 2 and the button 0 successively.

Displaying current channel number on screen

Press the **DISPLAY** button on the remote control; the current channel number and audio mode will display on the top-right corner of the screen. It will last for 5 seconds, or you can press the **DISPLAY** button again to clear the screen.

Switching between two channels

Press the **RECALL** button on the remote control to return to the previous channel that you have just viewed. Press the **RECALL** button repeatedly; the screen will alternate between the present and previous channel.

Setting the child lock

Press the **LOCK** button to lock or unlock the TV.

When the TV is locked, the screen will turn to black background, and nothing can be viewed unless you press **LOCK** again to unlock it.

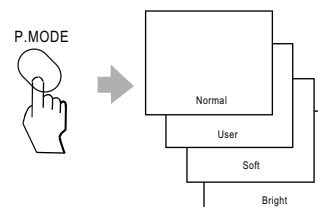
Setting the sleep timer

Press **SLEEP** on the remote control to display **SLEEP TIMER** screen. Press the **SLEEP** button repeatedly to progressively set the sleep timer for longer periods of time starting with 5 minutes, 10 minutes, 15 minutes,....., 120 minutes and then back to 0 minute. Selecting Off turns the sleep timer off.

Shortcut keys operation

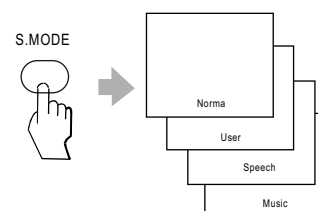
Selecting the picture mode

You can select the picture mode instantly from among three preset modes and one user-set mode. Press the **P.MODE** button on the remote control repeatedly to select the desired picture mode.



Selecting the sound mode

You can select a sound effect from among three preset modes and one user-set mode. Press the **S.MODE** button on the remote control repeatedly to select the desired sound effect.



Selecting MTS/SAP broadcasts

You can enjoy watching TV while you listen to high-fidelity stereo sound with the MTS feature. MTS can also transmit a second audio program (SAP) containing a second language or other audio information.

Press the **SAP** button on the remote control to switch among Mono, Stereo and SAP audio modes.

NOTE: In the general settings menu, you are also able to change the audio mode under the MTS setting

Scanning all available channels

You can scan all available channels by pressing the **SCAN** button on the remote control. Press the SCAN button again to cancel this function.

Using CCD (Closed Captioning)

You can turn the CCD function on by pressing the **CCD** button on the remote control . See page 16 for more details .

Using Parental Control (V-Chip Technology)

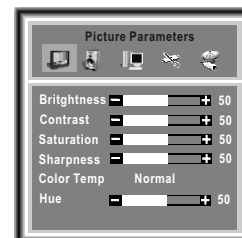
You can access the parental control function by pressing the **PARENT** button on the remote control. See page 16 for more details .

Menu operation

Using the Picture Parameters menu

Adjust picture settings

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Picture Parameters**, and press the [▼] button to enter **Picture Parameters** menu.
- 3) Press the [▲ or ▼] button to select the item you want to adjust.
- 4) Press the [◀ or ▶] button to adjust the level.



The adjusted data is stored automatically as the USER picture preset. To access the USER picture preset, press the P.MODE button repeatedly until the word 'USER' appears on screen.

NOTE: 1) There are some differences among different input modes. For example, **Phase** will disappear unless the input signal is from VGA or Component.

2) The item **Color Temp** is for reference only.

- 5) Press OK button to confirm your selection. Press OK again to exit from the menu.

Using the Audio Settings menu

Adjust audio settings

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Audio Settings**, and press the [▼] button to enter **Audio Settings** menu.
- 3) Press the [▲ or ▼] button to select the item you want to adjust.
- 4) Press the [◀ or ▶] button to adjust the level.

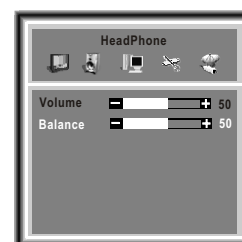


The adjusted data is stored automatically as the USER audio preset. To access the USER picture preset, press the S.MODE button repeatedly until the word 'USER' appears on screen.

- 5) Press OK button to confirm your selection. Press OK again to exit from the menu.

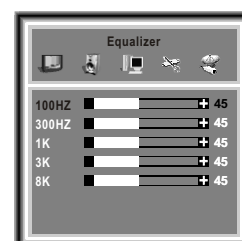
HeadPhone settings

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Audio Settings**, and press the [▼] button to enter **Audio Settings** menu.
- 3) Press the [▲ or ▼] button to select the item **HeadPhone**.
- 4) Press the [◀ or ▶] button to enter **HeadPhone** menu.
- 5) Press the [▲ or ▼] button to select the item you want to adjust.
- 6) Press the [◀ or ▶] button to adjust the level.
- 7) Press OK button to confirm your selection. Press OK again to exit from the menu.



Equalizer Setting

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Audio Settings**, and press the [▼] button to enter **Audio Settings** menu.
- 3) Press the [▲ or ▼] button to select the item **Equalizer**.
- 4) Press the [◀ or ▶] button to enter **Equalizer** menu.
- 5) Press the [▲ or ▼] button to select the item you want to adjust.
- 6) Press the [◀ or ▶] button to adjust the level
- 7) Press OK button to confirm your selection. Press OK again to exit from the menu.

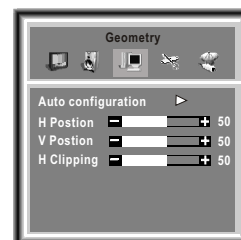


Menu operation

Using the Geometry menu

Geometry

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Geometry**, and press the [▼] button to enter **geometry** menu.
- 3) Press the [▲ or ▼] button to select the item you want to adjust.
- 4) Press the [◀ or ▶] button to change the value.
- 5) Press OK button to confirm your selection. Press OK again to exit from the menu.



H Clipping: The item allows you to extend or shorten the TV image in the horizontal direction.

H Position: The item allows you to move the TV image in the horizontal direction.

V Position: The item allows you to move the TV image in the vertical direction.

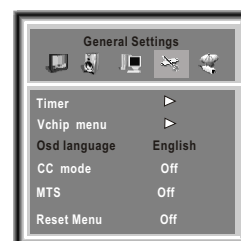
Auto Configuration: When the image looks abnormal, you can try to choose the **Auto Configuration** item to correct the image.

NOTE: The disabled items will disappear. For example :H Clipping will disappear unless the valid input signal is VGA or Component.

Using the General Settings menu

Timer

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **General Settings**, and press the [▼] button to enter **General Settings** menu.
- 3) Press the [▲ or ▼] button to select **Timer**.
- 4) Press the [◀ or ▶] button to enter the **Timer** menu.
- 5) Press the [▲ or ▼] button to select the item you want to adjust.
- 6) Press the [◀ or ▶] button to change the value
- 7) Press OK button to confirm your selection. Press OK again to exit from the menu.

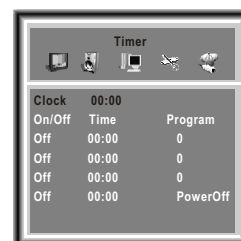


Clock: This item allows you to set the local time on the TV.

On/Off : The item allows the TV automatically to turn on or jump to a preset channel or switch to standby mode when the preset time is reached.

Time: The item allows you to set the preset time, turn on time, standby time.

Program: the item allows you to preset the channel number that the TV will turn to at the preset time.



Menu operation

OSD Language: Press the [◀ or ▶] button to change the **OSD Language**.

CC Mode: Press the [◀ or ▶] button to switch among the different Closed Captioning options **CC1~4, T1~4** and **Off**.

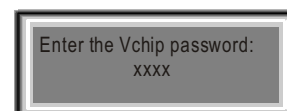
MTS : Press the [◀ or ▶] button to switch among **Stereo, SAP and Mono audio modes**.

Reset Menu : Press the [◀ or ▶] button to switch between **On** and **Off** and if the item is switched to **On**, the **Option** menu will appear when you turn on the TV the next time.

V-Chip Menu (Parental Control)

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **General Settings**, and press the [▼] button to enter **General Settings** menu.
- 3) Press the [▲ or ▼] button to select **Vchip Menu**.
- 4) Press the [◀ or ▶] button to enter the **Vchip Menu**.

Note: By pressing the **PARENT** button on the remote control, you can access the same menu

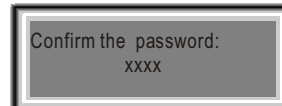


Password change:

Password is a four-digit number. The preset password is 0000.

You must enter a password to access the next three operations

- 1) Press the [▲ or ▼] button to select **Password change**, and press the [▶] button to enter .
- 2) Press the 1-9 button to input the new password. Enter the new password again to confirm the password change.



MPAA Rating /TV PG Rating/Canadian English/Canadian French:

- 1) Press the [▲ or ▼] button to select **MPAA Rating /TV /PG Rating/ Canadian English or Canadian French**, and press the [▶] button to enter it
- 2) Press the [▲ or ▼] [◀ or ▶] button to select the rating, and press [▶] button to block or unblock the selected rating

About MPAA Rating:

The Motion Picture Association of America (MPAA) uses a rating system to qualify motion picture content. Television broadcasters employ a rating system to qualify the content of television programs as well. The MPAA and TV ratings work with the V-CHIP feature and allow you to block out programming above the rating limits you determine.

Rating	Defined as
G	General audience
PG	Parental Guidance suggested
PG-13	Parents strongly cautioned
R	Restricted
NC-17	No one 17 and under admitted
X	Adult audience only

Menu operation

About TV PG Rating:

The TV ratings are divided into two groups: age-based and content-based.

Age	Defined as
TV-Y	All children
TV-Y7	Directed to older children
TV-G	General audience
TV-PG	Parental Guidance suggested
TV-14	Parents Strongly cautioned
TV-MA	Mature Audience only

Contents	Defined as
FV	Fantasy Violence
D	Suggestive dialogue
L	Strong language
S	Sexual situations
V	Violence

About Canadian English:

Rating	Description
E	Exempt
C	Children
C8+	Children eight years and older
G	General Programming, suitable for all audiences
PG	Parental Guidance
14+	Viewers 14 years and older
18+	Adult Programming
NA	Rating not applicable

About Canadian French:

Rating	Description
E	Exempt
G	General
8+	8+ General <input type="checkbox"/> Not recommended for young children
13+	Programming may not be suitable for children under the age of 13
16+	Programming is not suitable for children under the age of 16
18+	Programming restricted to adults
NA	Rating not applicable

NOTE: As you block ratings, all ratings higher than the ones you select are blocked as well. For example, if you choose to block the MPAA rating R, the higher ratings, NC-17 and X, are automatically blocked too.

Using the Search menu

TV Reception Mode

You can set Tv source as aerial or cable antenna input.

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Search**, and press the [▼] button to enter **Search** menu.
- 3) Press the [▲ or ▼] button to select **Tuning Mode**.
- 4) Press the [◀ or ▶] button to switch among **Air**, **Cable**.



Skip

Allows you to skip a preset TV channel. This is handy when you want to avoid accessing a channel regularly.

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item **Search**, and press the [▼] button to enter **Search** menu.
- 3) Press the [▲ or ▼] button to select **Skip**.
- 4) Press the [◀ or ▶] button to skip or unskip the present channel.

NOTE: The 'skipped' channels cannot be accessed by **CH+** or **CH-** , but you can access them by digit button.

Auto Search

- 1) Press the **MENU** button to enter the main menu.
- 2) Press the [◀ or ▶] button to select the item Search, and press the [▼] button to enter **Search** menu.
- 3) Press the [▲ or ▼] button to select **Auto Search**.
- 4) Press the [◀ or ▶] button to start auto search.



Appendix

Cleaning and care

WARNING: TV sets use high voltage. Do not try to remove the back cabinet yourself. There are no user serviceable parts inside. Note that opening the cabinet could void your warranty. Refer servicing to qualified service technicians.

To clean the TV screen:

- 1) Unplug the TV to avoid possible shock hazard.
- 2) Use a damp cloth or clean cellulose sponge to clean the TV screen and trim. Do not allow water to spill into the cabinet or damage may occur.
- 3) Wipe off any excess moisture with a clean dry cloth.
- 4) Polish the cabinet with a quality furniture polish to maintain the finish and appearance of the cabinet.

Caution: Never use strong solvents such as thinner, benzene, or other chemicals on or near the cabinet. These chemicals can damage the finish of the cabinet.

Important notice

1. When the TV does not behave properly for some reason, please unplug the power and plug it back in.
2. Displaying a still picture for a long time will cause image sticking when the input signal is interlaced. The image sticking will disappear when you turn off the TV for a moment. When using an interlaced input signal, we recommend not to display a still image for a long time.

Appendix

Troubleshooting

Before calling a service technician, please check the following table for a possible cause of the problem and some solutions.

Problem	Solution
TV will not turn on	<ul style="list-style-type: none">• Make sure the power cord is plugged in, then press POWER.• The remote control batteries may be dead. Replace the batteries.
No picture, no sound	<ul style="list-style-type: none">• Check the antenna/cable connections.
No sound, picture OK	<ul style="list-style-type: none">• The sound may be muted. Press VOL+.• The station may have broadcast difficulties. Try another channel.
Poor sound, picture OK	<ul style="list-style-type: none">• The station may have broadcast difficulties. Try another channel
Poor picture, sound OK	<ul style="list-style-type: none">• Check the antenna connections.• The station may have broadcast difficulties. Try another channel.• Adjust the picture from the menu.
Poor reception of broadcast channels	<ul style="list-style-type: none">• The station may have broadcast difficulties. Try another channel.• Check the antenna connections.• If you are using a VCR, make sure the SOURCE button is set correctly.
Multiple images	<ul style="list-style-type: none">• The station may have broadcast difficulties. Try another channel.• Use a highly directional outdoor antenna.
Poor colour or no color	<ul style="list-style-type: none">• The station may have broadcast difficulties. Try another channel.• Adjust the TINT and COLOR in the menu.
The remote control does not operate	<ul style="list-style-type: none">• Check to see if the SOURCE mode is properly set.• There may be an obstruction between the remote control and the remote control sensor.• The remote control batteries may be dead. Replace the batteries.

NOTICE:

Although the LCD screen is made with high-precision technology and has effective pixels of 99% or more, black dots may appear or bright points of light (red, blue or green) may appear constantly on the LCD screen. This is a structural property of the LCD panel and is not a malfunction.

Appendix

Specifications

	T12020
Diagonal display size	20 inches
Television system	NTSC standard
Channel coverage	VHF: 2~13 UHF: 14-69 Cable TV: 2~13, A~W, W+1~W+84, A-5~A-1, 4A
Power source	120VAC, 60Hz
Power consumption	55W
Connection Interface	<p>RF input: Cable/ antenna RF $\times 1$ 75 VHF/UHF input</p> <p>VIDEO input: VIDEO $\times 1$ 75 1.0Vp-p input</p> <p>S-VIDEO $\times 1$ Y: 75 1.0Vp-p input</p> <p>C: 75 0.286Vp-p input</p> <p>YPbPr/YCbCr $\times 1$ Y: 75 1.0Vp-p input</p> <p>YPbPr/YCbCr : 75 1.0Vp-p input (480P/60Hz, 480i/60Hz, 720P/60Hz, 1080i/60Hz)</p> <p>VGA : Analog RGB 15pin $\times 1$ 75 0.70Vp-p input (640X480/60Hz)</p> <p>VIDEO output: VIDEO $\times 1$</p> <p>AUDIO input: AV audio $\times 1$ >10K 1.0Vrms input</p> <p>AUDIO output: AV audio $\times 1$</p> <p>Mini-jack for stereo (3.5 ϕ) $\times 1$</p>
Dimensions	<p>Width: 625mm</p> <p>Height: 460mm</p> <p>Depth: 300mm</p>
Net Weight	26lbs
Supplied accessories	Remote control, AC cord, Batteries

Design and specifications are subject to change without notice.

CUSTOMER NOTICE: Operate carefully to prevent damage to the screen.